

GATE ARMS+

LED SAFETY LIGHT SYSTEMS



LED BARRIER ARMS

INSTALLATION MANUAL

www.GateArms.com



IMPORTANT SAFETY INFORMATION

**For safe installation and trouble-free operation,
YOU MUST:**

- Carefully read this installation manual before beginning.
- Always use appropriate PPE during installation including safety glasses, gloves and hearing protection as needed.
- Follow each installation step exactly as shown.
- Observe all local, state, and national electrical codes.
- Pay close attention to all danger, warning, and caution notices given in this manual.
- Always use the parts supplied by the manufacturer or other prescribed parts unless directed otherwise.

NOTE: Use of non-prescribed parts can cause serious accidents such as the unit to fall, electric shock, or fire.

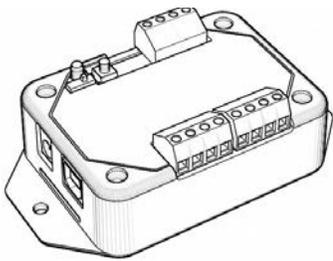
**USE CAUTION WHEN WIRING: ELECTRICAL SHOCK CAN
CAUSE SEVERE PERSONAL INJURY OR DEATH.
ONLY QUALIFIED & EXPERIENCED INSTALLERS SHOULD
ATTEMPT TO WIRE THIS SYSTEM.**

- Do not supply power to the unit until all wiring and connections are completed or reconnected and checked.
- Highly dangerous electrical voltages and moving parts are used in the operator. Carefully refer to the wiring diagram and these instructions when performing any wiring.
- Ground the unit following local electrical codes.
- Connect all wiring tightly. Loose connections can become disconnected due to vibrations from the equipment.
- Install as directed. GateArms+ LED Barrier Arms and LED Controllers are intended for use as described herein and by the product literature available for download at www.GateArms.com.
- Any misuse, alteration, or modification of GateArms+ branded products beyond what is described in the available product literature will void all warranties.

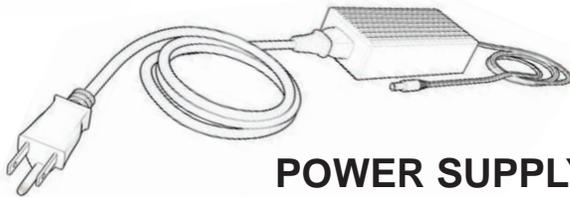
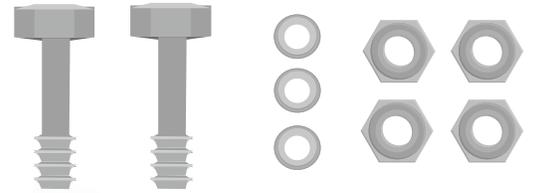
KIT COMPONENTS

- White Barrier Arm (8ft-17ft) w/pre-installed LED Strip(s) [**ARM##LED**]
- 4ft LED Harness Cable [**HARNESS4-G**]
- 13# Counterweight [**CTRWT**] *ARM17LMKIT only*
- Parts Kit [**INSTKITGATE**] containing:
 - (1) Gate LED Controller [**CONTROL-GATE**]
 - (1) 110V to 24VDC Power Supply [**PS24VIN-2.5A**]
 - (2) 5/16" x 3 1/2" Stainless-Steel Bolts
 - (4) 5/16" Black Nylon Nuts (2 extra)
 - (3) 5/16" Stainless-Steel Washers (1 extra)
 - (1) Cable Strain Relief Fixture
 - (1) 4ft Signal Cable (4-wire 22AWG)
 - (1) Installation Manual

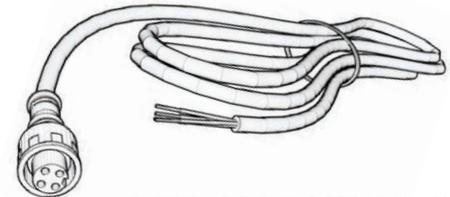
LED CONTROLLER



SIGNAL CABLE



POWER SUPPLY



LED HARNESS CABLE

RECOMMENDED TOOLS & SUPPLIES (not included)

- 1/2" Open End Wrench
- 1/2" Wrench or Socket
- 9/16" Wrench or Socket (for Counterweight)
- 5/8" Drill Bit (Metal Drilling for Dual LED)
- 1/2" Drill Bit (Metal Drilling for Single LED)
- Wire Stripper
- Power Drill
- Small Flat Screwdriver
- Voltmeter (AC & DC)
- Rat-tail file (optional)
- Dielectric Grease
- Zip Ties

INSTALLATION OVERVIEW

1. PROGRAM THE LED CONTROLLER

The Gate LED Controller is a programmable device. Change settings using 1 of 3 methods:

1. Mode Button (See LED Controller Programming insert)
2. USB port & PC Configuration Tool (Download from website)
3. Jumper wire(s)

1.1 LED Controller ships set to Mode 3. See LED Controller Programming insert for full details. See Wiring Schematic insert for wiring to the most common gate operators.

2. TURN OFF OPERATOR POWER



WARNING: Serious injury could occur if power is not disconnected prior to installation.

3. REMOVE EXISTING ARM

Remove existing gate arm from operator and replace existing bolts and washers with the new stainless-steel parts included.

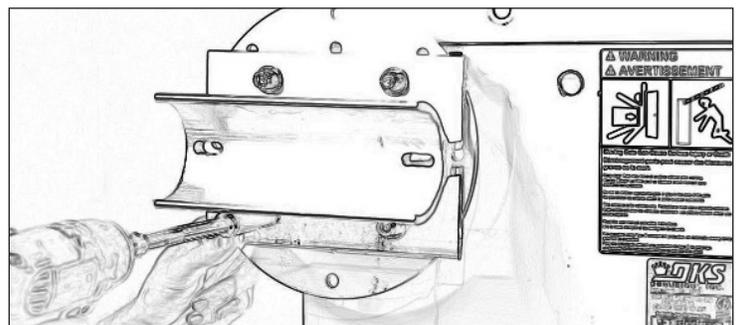
NOTE: Always throw away used nylon nuts.

Used nylon nuts should never be reused.

4. INSTALL NEW GATEARMS+ BRACKET

PART NO: [BRACKMULTI]

If there is not a 3" arm bracket already installed on the operator, install it now. Brackets are available for all common gate operators.



5. INSTALL NEW GATE ARM

Install bolts from front of bracket towards the operator (unless using GateArms+ bracket).

LiftMaster: Operator, Nylon Nut, Washer, Bracket, Arm, Washer, Bolt head. Bolt facing toward operator.

GateArms+: Operator, Bracket, Bolt head, Arm, Washer, Nylon Nut. Bolt facing away from operator.

Black nylon nuts are UV-protected. Do not over-tighten nuts. They should be snug, but they are easy to strip. Stop tightening once the bolt exits the nut.

IMPORTANT: Arm must not wiggle at all inside the bracket or it may crack due to unequal stress loads. **THIS WILL VOID THE WARRANTY.** If arm wiggles, replace the pivot pin or operator bracket with a new 3" bracket.

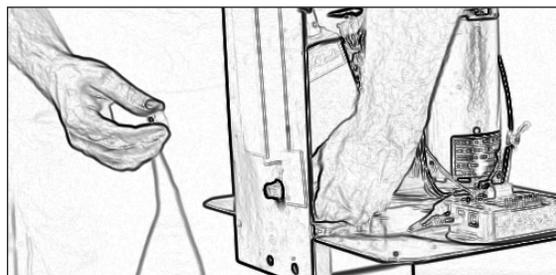
5.1 **Install Counterweight - (ARM17LM ONLY)**

If installing an ARM17LM, insert counterweight into the end of arm near bracket.

6. DRILL HOLE FOR CABLE RELIEF FITTING

Decide how to route the Harness Cable to the operator chassis, and where to penetrate the chassis. Position the hole so that the cable will be as hidden and short as possible. Try to be directly behind the new gate arm's connector.

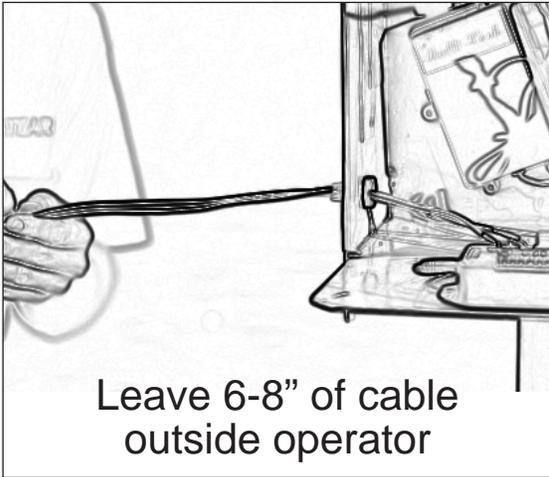
- Drill hole in gate arm operator chassis (Single LED – 1/2", Dual LED – 5/8")
- Deburr hole with drill bit or metal rattail file.



7. INSTALL CABLE RELIEF FITTING

Remove outer (tension) nut from cable relief fitting, then insert fitting into the new hole. Tighten the back nut onto the fitting inside the operator housing. This nut holds the fitting to the operator wall.

8. PULL LED HARNESS CABLE(S) INTO OPERATOR



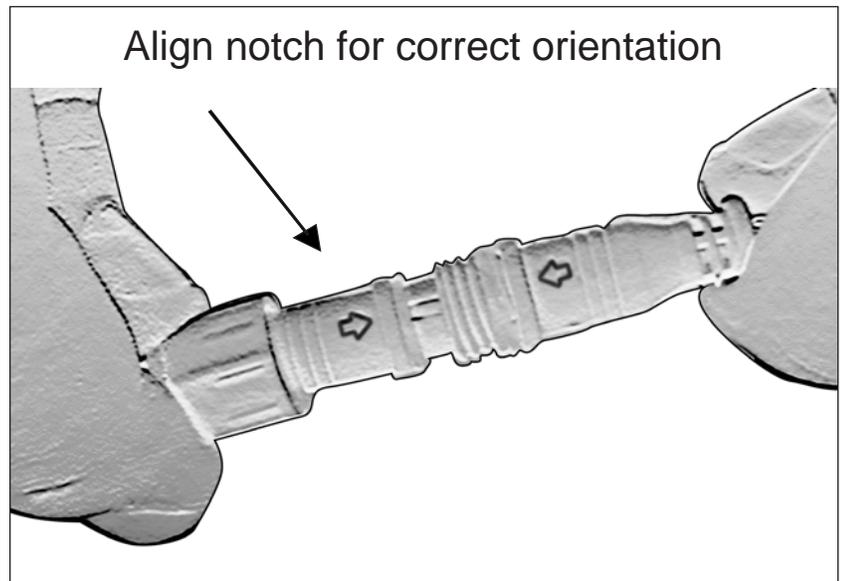
Slide the raw wire end of the LED Harness Cable through the cable relief tension nut entering through the narrowest side.

If Dual LED, slide both cables through the same fitting. Leave 6-8" of cable outside of the operator. It is essential that the cable always has some slack in it, regardless of the arm position.

9. CONNECT LED STRIP TO LED HARNESS CABLE

Plug one end of the connector into the other using the arrow alignment notch. Tighten nut onto the connector.

There is dielectric grease inside the connector that ensures longevity of your connection points and creates a proper seal.



NOTE: Connector cap is cut on both sides to ensure it does not grab too tightly. This is by design so it will detach if gate arm is hit by a car.

10. INSTALL POWER SUPPLY AND CONTROLLER INSIDE CABINET

Plug DC power plug from the 24V power supply into the power port of LED Controller located on the side near the USB port. Zip tie the 24V plug to the controller's loop.

Place the 24V power supply and LED Controller inside the gate arm operator chassis where they will remain safe and dry. Route power supply power cord to an available receptacle on the operator's 120 VAC outlets.

NOTES:

1. **Do not plug 110V plug into the outlet yet!**
2. **IMPORTANT:** The controller can only accept power voltage of 24VDC. Higher voltage may irreversibly damage the LED Controller. **THIS WILL VOID WARRANTY.**

11. CONNECT LED HARNESS CABLE(S) TO CONTROLLER

Route LED Harness Cable through the inside of gate operator chassis until the end is located near where the LED Controller will be positioned.

Connect LED Harness Cable's wires to the press-on header(s). Match wire colors to labels on the LED Controller cover.

Push press-on header(s) vertically onto the LED Controller pins with screw heads facing outwards.

WARNING: Do not connect more than 20' of LEDs per header. More than 20' may cause LED dimming.

NOTE: Ensure all cables will always avoid the operator's pulley and other moving parts or sharp edges.

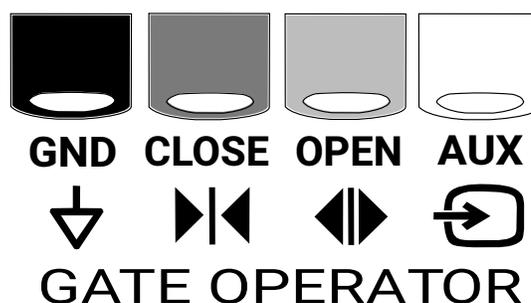
12. CONNECT SIGNAL CABLE TO LED CONTROLLER

The installation kit includes a 4-wire Signal Cable for connecting to the signal wire posts on the gate operator's control board.

Remove the upper-right 4-pin press-on wire header from the LED Controller.

Connect one end of the Signal Cable's wires to the press-on header. Note pin definitions on the LED Controller cover.

- Black = Ground
- Red = Close
- Green = Open
- White = Aux



Plug press-on header into the LED Controller with screw heads

facing OUT. Route the Signal Cable from the LED Controller to the gate operator's control board.

13. CONNECT SIGNAL CABLE TO OPERATOR

Connect the Signal Cable to the gate operator's control board. See Wiring Schematic insert for details.



WARNING - OVER-VOLTAGE WILL VOID WARRANTY

Signals entering the LED Controller cannot exceed 30 VDC.

Higher voltage may cause irreversible damage.

D/C SIGNALS ONLY: The LED Controller can only accept D/C.

A/C signals may damage the LED Controller.

NOTE: We offer an optional **A/C Signal Converter board** that allows the use of A/C signals with this LED Controller.

14. CONFIRM WIRING

Take a moment to reconfirm all connections on each of the cables.

- Check both sides of the power cable.
- Check the gate operator's signal wire posts where the Signal Cable is connected. Ensure you are tied into the correct circuits for Open & Close, and that Common (Ground) is well connected.
- Check the LED strip(s) to ensure the wire colors correspond correctly to the colors printed on the LED Controller.

15. REVIEW WIRE MANAGEMENT

Use zip ties to secure all wiring inside the gate operator housing so the pulley and belt will never touch any wires.

16. TURN ON OPERATOR POWER

First, turn on the 110V switch and then plug the 24V power supply into the 110VAC outlet located inside the operator.

NOTE: Adapter can accept 100-240VAC.

17. TURN LED CONTROLLER POWER-SWITCH TO ON

Turn LED Controller switch on. The amber LED by the switch should immediately light up. The LED strip should turn on (red) after 1 second.

18. TEST OPEN HEAVY GATE (IF INTERLOCK)

Open the heavy gate.

- LED Lights should flash amber while heavy gate is opening.

19. TEST OPEN BARRIER ARM - ARM GOES UP GREEN

Raise the gate arm by triggering Open.

- LED Lights should flash red when the arm begins to go up.
- LED Lights should turn solid green when arm is fully open.

20. TEST CLOSE BARRIER ARM - ARM GOES DOWN RED

Lower the gate arm by triggering Close.

- LED Lights should flash red when the arm begins to descend.
- LED Lights should turn solid red when arm is fully closed.

21. FINALIZE

- Close and secure gate operator case.
- Check the gate operator belt. If it is loose, tighten it.
- Add oil to gearbox if needed.

Still need help? Call our Tech Support line at (786)339-9840.

There are many subtle configuration settings that can be tweaked to get your project working. We are eager to help you ensure that
EVERY PROJECT IS A SUCCESS!

CONGRATULATIONS!

You have completed the installation.

Run into an issue? No worries we have you covered.

Appendix A will help guide you with the installation or replacement of the LED Strip(s) within the Barrier Arm.

Appendix B will help you install the Configuration Tool program. See LED Controller Programming insert after software installation.

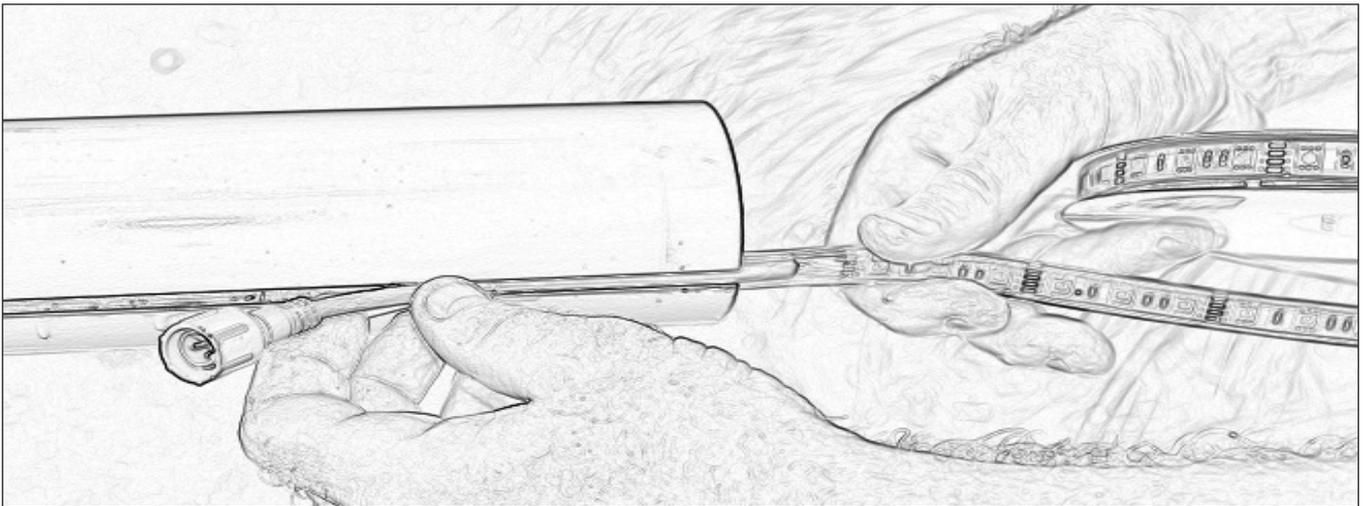
Appendix C will help guide you through some common issues.

Wiring Schematic Insert will help you wire to the most common gate operators. Contact Tech Support if your operator is not listed.

LED Controller Programming Insert will help guide you with programming the controller's optional features.

APPENDIX A: REPLACING LED STRIPS

1. Disconnect the LED strip wiring connector.
2. Remove white end cap from gate arm (far end only).
3. One person should gently pull on the LED strip from the far end, while another person gently pushes the LED strip towards the far end.
4. The LED strip will slide out of the track.
5. Put replacement LED roll in a bucket on the ground, or have a partner hold it.
6. Hold LED strip by the connector with LED chips facing out. Gently insert the new LED strip into the track from the far end. One person can push from the end while the other gently pulls the cable.
7. Pull LED strip into track until the wire is nearby the gate arm bracket. Leave at least an inch of space by bracket.
8. Cut the LED strip at the cut lines if necessary. Remove LED end cap from scrap piece. Glue end cap onto LED with silicone glue.
9. Replace the white gate arm cap on the gate arm end.
10. Put some dielectric grease inside both sides of the connector.
11. Connect the LED to the harness cable.
12. Put a dab of silicone glue near the bracket-end of the LED strip to prevent it from moving.
13. Test to ensure the LEDs function correctly.



APPENDIX B: INSTALL THE CONFIGURATION TOOL

INSTALL PROGRAM

1. Visit www.GateArms.com/downloads and click on the LED Controller Configuration Software to download.
2. You may need to stop any antivirus programs that are running.
3. Open (run) downloaded file with Administrative rights to install it.

CONNECT CONTROLLER TO PC

1. Detach power from LED Controller.
2. Use a Type-B (printer) USB cable (not included) to connect the LED Controller to the PC.
3. The PC should immediately recognize that the device was connected, although it will not install any supporting driver software.
4. Use the Configuration Tool to program the LED Controller.
5. Detach the USB Cable from the LED Controller.
6. Test LED Controller on your gate.

NOTE: If device is NOT RECOGNIZED, you will need to manually connect the driver file to the device using the following steps:

1. Open Device Manager in Windows
 - a. Right-click “Computer”, then choose “Manage”
 - b. Or, click “Start Button”, then “Administrative Tools”, then “Computer Management”, then “Device Manager”
2. Find “LED Driver” with an alert mark on it, probably in “Unknown Devices” group
3. Right-click that item, then choose “Update Driver Software”
4. Click “Browse...click “Browse” again if necessary, to search your computer C: drive
5. Open “Program Files (x86)”
6. Find folder “GateArms.com”, then “Configurator”, then “Driver”
Click the “Driver” folder, then click “OK” button
7. Click the “Next” button and “Close”.

APPENDIX C: TROUBLESHOOTING

No gate arm lights on/wiring disconnect

Possible issue: Power Supply problems

- Check LED Controller. Is its amber LED on?
- Is the 110V power adapter on? Check 110V power wiring at the gate operator's power source. Trace wire from LED Controller.
- Check Press-on Headers. Are the wires well-secured? Are they pressed in vertically all the way? Screws facing outwards? Match wire colors with the words on the LED Controller's cover.
- Ensure the external connector mating the LED Harness Cable to the LED Strip is fully connected. Check pins inside the connector.

Red lights stay on, No Green when gate goes up

Possible Issue 1: Open Signal Wire disconnected

- If red stays on, the Open signal is not being received.
- Check Open (green) signal wire connection at the Signal Header of the LED Controller.
- Check the Open signal wire connection at the gate operator control board post. Refer to the Wiring Schematic insert and confirm correct wiring. Use a multimeter to ensure voltage or continuity is changing as expected when the gate opens.
- Are you using multiple posts for Open devices (i.e. post 1 for guard, post 2 for RFID, post 3 for clicker)? You must tie all 3 open posts together with jumper wires so the LED Controller will sense the voltage changes on all posts.

Possible Issue 2: Controller Mis-programmed

- Ensure controller is programmed correctly for your scenario and gate operator. See Wiring Schematic insert.

Barrier Arm goes GREEN when heavy gate begins to open, but should stay RED or FLASH AMBER until barrier arm goes up

Possible Issue: Aux Wire disconnected

- Connect the Controller's Aux signal wire to the Interlock post on the operator board.

NOTE: You may need to use the Configuration Tool to change the default Auto Close Timer setting (29 sec).

LEDs go from Green back to Red while vehicle is still in the gate

Possible Issue 1: Controller "Close" set to Entering

- Program the LED Controller. Set Close to trigger on "Exiting".

Possible Issue 2: LED Controller's timer is set too low for your scenario

- Program the LED Controller. Set the Timer to Disabled or to a higher value.

LEDs stay Green too long

Possible Issue: Close Signal Wire disconnected/Timer to Close

- Connect the Controller's Close signal wire to the close output post on the operator board.
- Check Close (red) signal wire connection at the Signal Header.
- Check Close signal wire connection at the gate operator control board post.
- If no close port is used (timer to close), change the Auto-Close Timer duration to match the gate-close timer.



TECH SUPPORT HOURS
MONDAY - FRIDAY
9:00AM - 5:00PM EST

(786) 339-9840
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support@gatearms.com

LED Controller Patent # 11089662
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Manual Rev# 2023-08v1.0

LED Controller Configuration Tool

GATE ARMS+

LED Controller Configuration Tool

Select a Profile

Profile

- Barrier Arm
- Barrier Arm with Heavy Gate
- Old-style Barrier Arm with Heavy Gate
- Liftmaster Mega-Arm
- Liftmaster Mega-Arm with Interlock
- Doorking 1601
- Hysecurity / Dry Contact
- Magnetic Operator
- Amano-McGann
- Swing Gate Kit
- Flat Gate Kit
- Direct to Motor

Add Remove Save

Input Logic

Firmware: Basic (Universal) / Advanced (GAT only)

Open Signal

Idles On: Voltage / Ground / No Connection

Triggers On: Voltage / Ground / No Connection

Triggers When: Entering / Exiting

Close Signal

Idles On: Voltage / Ground / No Connection

Triggers On: Voltage / Ground / No Connection

Triggers When: Entering / Exiting

Aux Signal

Enabled: Yes / No

Idles On: Voltage / Ground / No Connection

Triggers On: Voltage / Ground / No Connection

Triggers When: Entering / Exiting

Auto Close Timer

Enabled: Yes / No

Trigger at: 28 seconds

Signals

Detection Threshold: ~ 2.5 VDC / ~ 8.5 VDC

Noise Cleaning: 19 milliseconds

Controller

Program Now

* Visit www.GateArms.com/downloads to download the software.

"Idles On" (Voltage / Ground / No Connection):

Defines the input's default state when there is no activity at the gate.
[VOLTAGE] The signal input will idle with voltage on the pin.
[GROUND] The signal input will idle with ground on the pin.
[NO CONNECTION] The signal input will idle on a disconnected circuit.

"Triggers On" (Voltage / Ground / No Connection):

Defines what causes a signal to fire.
[VOLTAGE] The signal input will trigger on voltage higher than the "Signals-detection threshold" voltage in configuration tool.
[GROUND] The signal input will trigger on ground.
[NO CONNECTION] The signal input will trigger when the grounded (or powered) circuit loses continuity and then "floats".

"Triggers When" (Entering / Exiting):

This setting defines whether a signal fires at the beginning of a signal's duration ("Entering") or when signal terminates ("Exiting").
[For Open] This should generally be "Entering" since the LED(s) change state immediately when an open signal is received.
[For Close] This should generally be "Exiting" since the signal should fire only after a close (loop) event is no longer being received.

"Signals – Noise Cleaning":

The LED Controller is extremely sensitive to voltage changes, so it only will consider a voltage change significant if it persists for longer than the noise cleaning milliseconds. Shorter signals are ignored.

Signals

Default State: Sets the color that appears on power-up.
Detection Threshold (8.5V / 2.5V): Trigger is fired when voltage crosses this threshold. Default is 2.5V.

Auto-Close Timer

When this Timer is enabled, it will reset green to red after the given time expires. This timer acts as a secondary (back-up) close event.

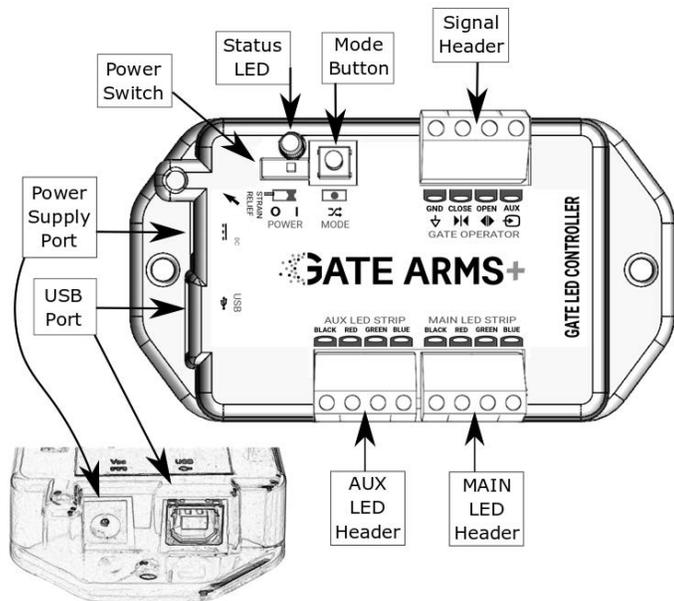
NOTES:

1. If the gate(s) is kept in a "locked open" position for extended periods, you should disable the timer to maintain green LED state.
2. In heavy gate + barrier arm (interlock) scenarios, you often must disable or extend the Timer's time-out because heavy gates are slow to open.

PROGRAM THE LED CONTROLLER MANUALLY

LED Controllers are shipped from our factory pre-programmed and ready to use. You can program most features using the LED Controller Configuration Tool on the PC or using the Mode button and 1 or 2 jumper wires. Contact GateArms+ Tech Support for assistance with any programming needs.

NOTE: Programming with a jumper is easy when no computer is available. If you need to program several controllers at once you should use the PC Configuration Tool. This program is also better for setting timers precisely.



Using MODE Button

1. Turn on LED Controller
2. Hold/Release Mode button for 3 sec. to rotate through 3 scenarios.
 - Mode 1:** Voltage-Drop with Interlock Option. No flashing in motion.
 - Mode 2:** Same as Mode 1, but with flashing-red in motion.
 - Mode 3:** Dry-contact limits with Interlock Option. Flashing-red in motion. Default profile for most operators.

Remove Special Programming

Hold Mode button down for approximately 3 seconds (with no jumpers) until fading effect of status LED reverts to solid.

Single-Action Programming

1. Remove all press-on headers temporarily.
2. Turn off LED Controller using power switch.
3. Connect jumper wire between 2 pins as described in following table.
4. While holding "Mode" button down, turn on power switch. Status LED will flash for 2 seconds. Release button. Feature is now set.
5. Turn off LED Controller. Remove jumper wire, reattach press-on headers. Turn on LED Controller.

Multi-Action Programming

1. Use for setting dimming level or duration of timers.
2. Follow single-action programming completely.
3. Turn LED Controller off, then back on again using its power switch.
 - a. Either tap or hold-down the Mode button, depending on need. For setting the dimming level: Press and release "Mode" button quickly. Each tap dims by 1 level (16 levels).
 - b. For setting time: Hold the "Mode" button for the duration you desire. Time is set when you release the button.
4. Turn LED Controller off, then back on again using its power switch.

Fig. 1

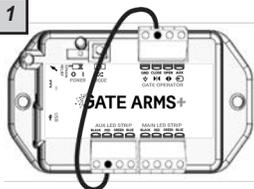


Fig. 2

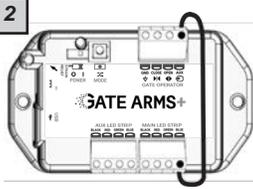


Fig. 3

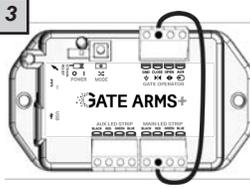


Fig. 4

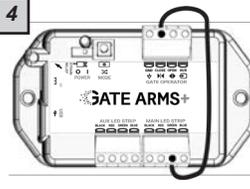


Fig. 5

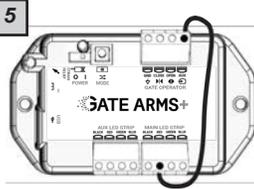


Fig. 6



Fig. 7

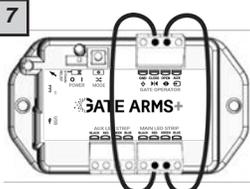
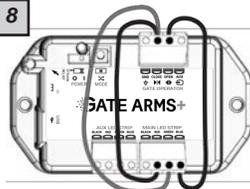


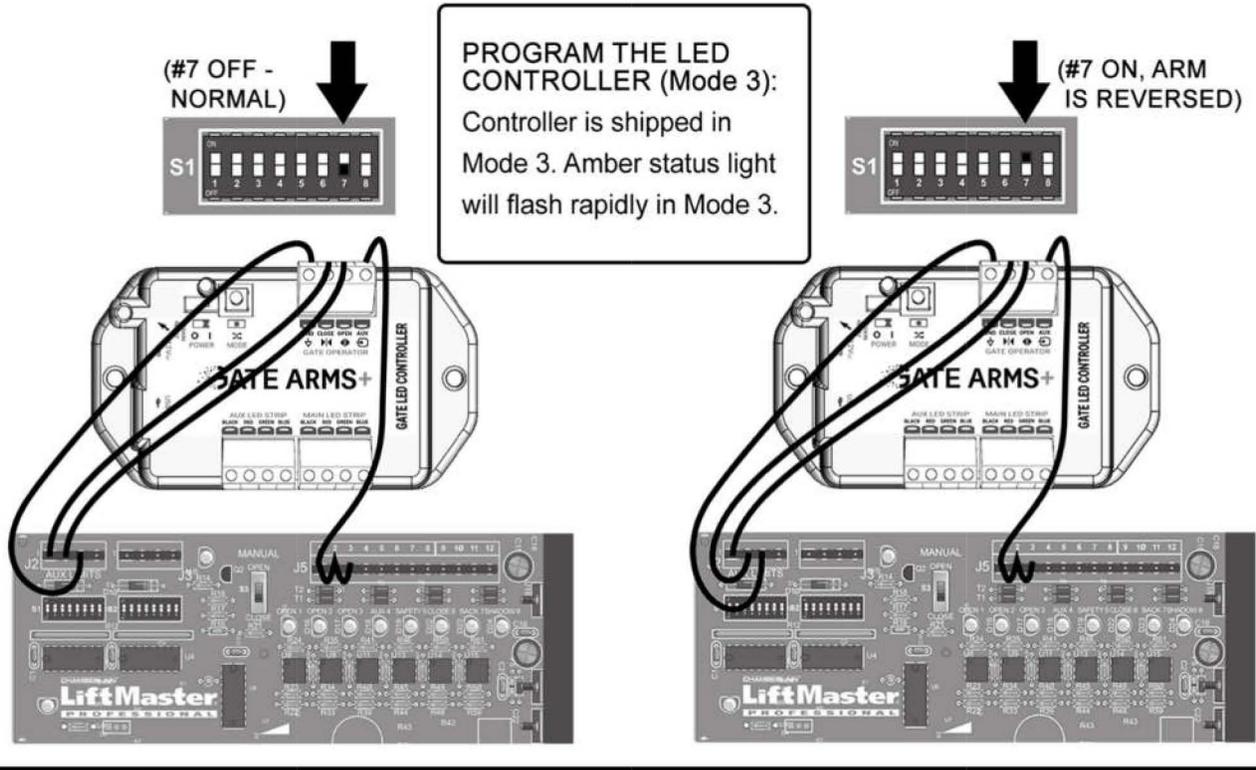
Fig. 8



	Feature	Jumper Connections	Description
Fig. 1	Enable Clone mode	Aux Red → Close	Enables clone mode (MAIN & AUX LED are identical on both sides).
Fig. 2	Enable Toggle Clicker on Aux	Blue → Aux	When AUX is triggered, the state of the LED(s) will toggle between red and green.
Fig. 3	Disable the Auto-Close Timer	Red → Close	Disables the auto-close timer. Default is 30 seconds.
Fig. 4	Enable Auto-Close & Configure Timer	Green → Close	When enabled, close will auto-trigger after a configured time. Default is 29 seconds.
Fig. 5	Enable Dimming on Aux Signal	Red → Aux	When AUX is triggered, LED strip(s) will dim to the configured brightness level. Default is 1/4th brightness.
Fig. 6	Configure the Brightness Level	Red → Open	LED strip(s) will dim to the configured brightness level continuously. There are 16 levels of brightness.
Fig. 7	Enable Green Fade-Out	Red → Close, Green → Open	When enabled, the green light stays on only for a short time. Default is 5 seconds.
Fig. 8	Flash on ALL Movement (Set time)	Blue → Open, Red & Green → Close	When enabled, the LED(s) will flash red when gate is opening or closing. Default is 3 seconds.

Liftmaster MegaArm Wiring (J2 method)

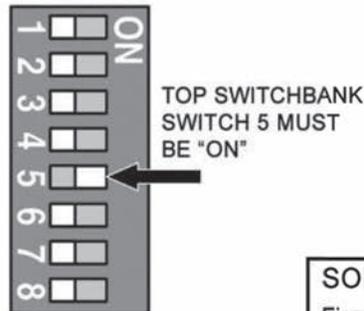
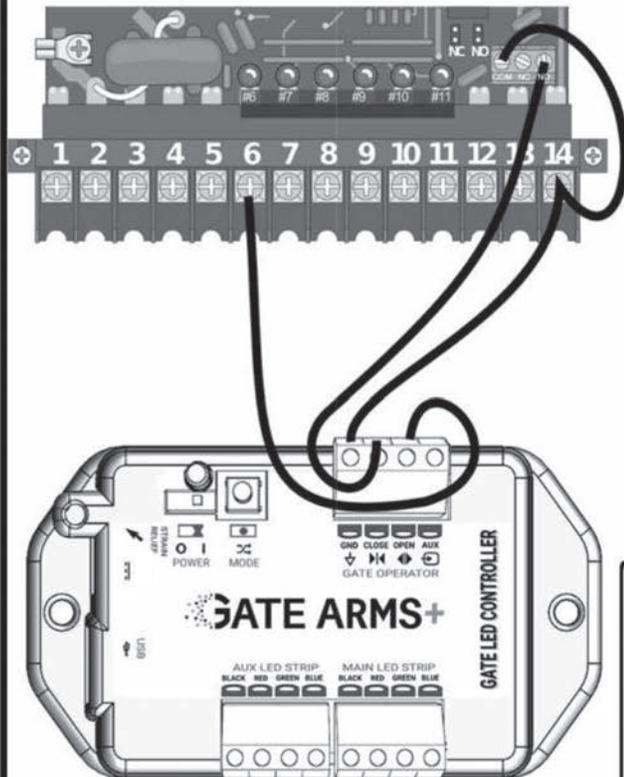
Connect to J2 port on upper-left of Control Board. Check S1 #7 setting.
 Only connect AUX wire to J5 if using Interlock function with a heavy gate or door.



DoorKing1601 Wiring

Connect CLOSE to NO port on ARM relay.

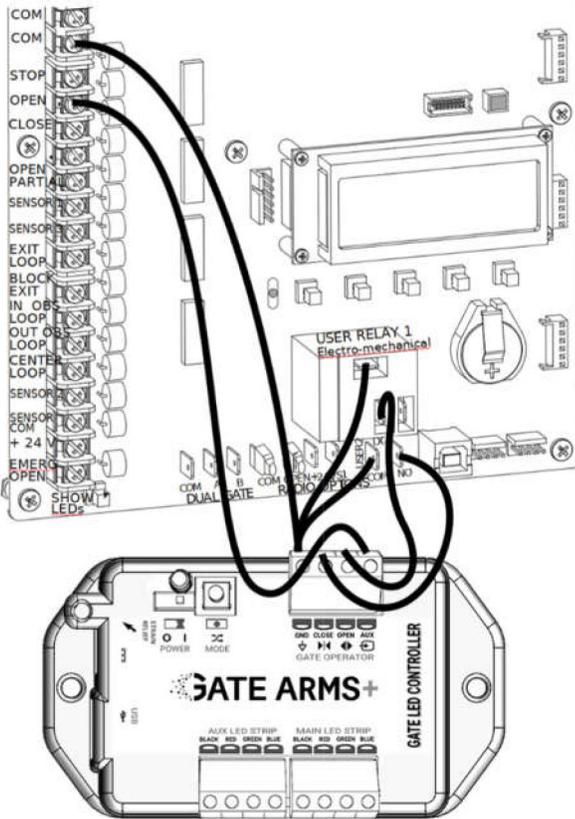
If using Interlock, contact Technical Support.



PROGRAM THE LED CONTROLLER (Mode 1 or 2):
 Mode 1: no flashing on move
 Mode 2: flashing on moving

SOFTWARE CONFIG:
 Firmware: Advanced
 Wired To: Operator Inputs
 Trigger Priority: Open
 Open Idles On: No-Connection
 Open Triggers On: Ground
 Open Triggers When: Entering
 Close Idles On: No-Connection
 Close Triggers On: Ground
 Close Triggers When: Exiting

HySecurity StrongArmPark DC Wiring



*Set Operator User Relay 1 to Open Limit (3)
Set Operator User Relay 2 to Close Limit (1)*

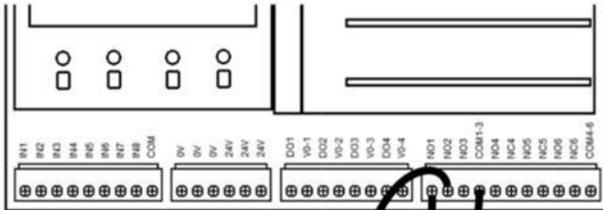
Do not connect AUX unless using Interlock.

PROGRAM THE LED CONTROLLER (Mode 3):
Controller is shipped in Mode 3. Amber status light will flash rapidly in Mode 3.

SOFTWARE CONFIG:
Wired to: Limit Switches
Open Idles On: No-Connection
Open Triggers On: Ground
Open Triggers When: Entering
Close Idles On: No-Connection
Close Triggers On: Ground
Close Triggers When: Entering

IF INTERLOCK AT GATE:
Aux Role: Heavy Gate
Aux Idles On: No-Connection
Aux Triggers On: Ground
Aux Triggers When: Entering
Amber Flashing: Enabled

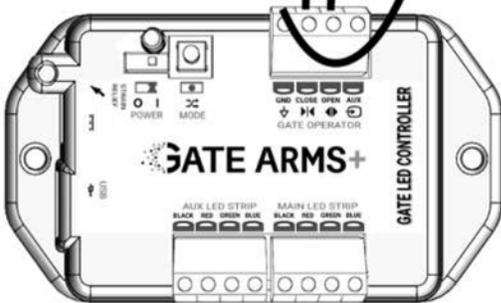
Magnetic-Automation MicroDrive Wiring



Use Operator User Relays NO1 & NO2.

*Set operator relay NO1 to Fully-Open
Set operator relay NO2 to Fully-Closed*

For MIB30/40 or Interlock wiring, call us!



PROGRAM THE LED CONTROLLER (Mode 3):
Controller is shipped in Mode 3. Amber status light will flash rapidly in Mode 3.

SOFTWARE CONFIG:
Firmware: Basic
Open Idles On: No-Connection
Open Triggers On: Ground
Open Triggers When: Entering
Close Idles On: No-Connection
Close Triggers On: Ground
Close Triggers When: Entering